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## NEWSLETTER

<http://home.vicnet.net.au/~bmbg/>

*Ensign's report* 1st May 2013

*It was good to have a night sail once more, after a long break, on April 7th at Queens Park. The weather was calm and warm, spectators showed some interest and we went round in circles.*



**Sea Shepherd ships** *(Special thanks to John E. for the photo)*



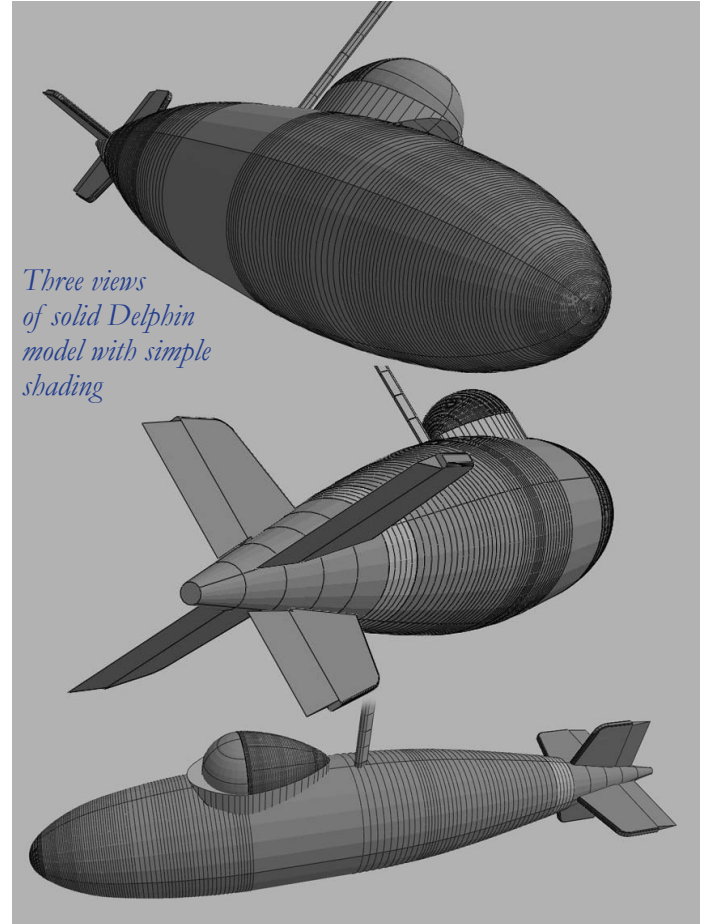
On a bike ride with the 'WOBBLIES' (a breakaway group of the BMBG) we spotted some ships of the Sea Shepherd anti-whaling fleet at Williamstown.

The SSS Bob Barker, pictured, could make quite an interesting model with its grey/blue/black splinter scheme and piratical markings. Sea Shepherd claim to have saved 932 whales from being culled this season.

### Computer aided modelling 4 - CAD

*Part 3*

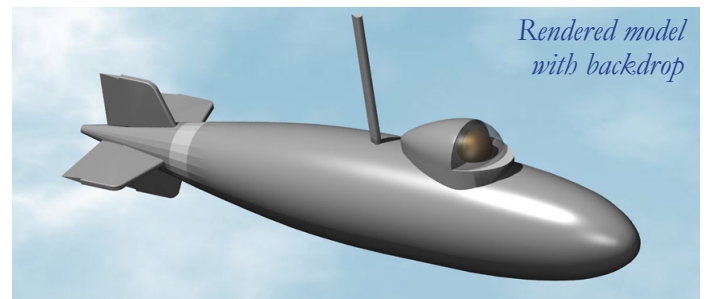
In the 2D CAD drawings previously considered, each point has x,y and z co-ordinates but the z value is set to zero. Assigning a value to it makes it a 3D point and the drawing made from such points a 3D drawing. A 3D CAD drawing can be a mesh (like a wire frame), a surface model (a panelled hollow shell) or a solid model. Ship hulls are usually drawn as surface models due to their irregular geometry, but as the Delphin midget submarine shown here is a 'body of revolution' it lent itself to being drawn as a solid model.



*Three views of solid Delphin model with simple shading*

Unlike a 2D drawing, which can only show projected views of the object in one plane and requires the viewer to construct a mental image of the object in their head, a 3D drawing shows the object as it would actually appear if it existed in reality. It can be spun around and viewed from any angle, given perspective and material properties, and 'rendered' to provide colour and shading effects.

The main problem when drawing in 3D is that your screen and input devices are only 2D. You can therefore only work on two axes at a time, and are constantly having to re-set your axes to the appropriate two out of the three possible ones. It is all too easy in the process to come adrift and find yourself 'lost in space'. Danger Will Robinson!



*Rendered model with backdrop*